

Date: Mon, 11 Apr 94 04:30:30 PDT  
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>  
Errors-To: Ham-Ant-Errors@UCSD.Edu  
Reply-To: Ham-Ant@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Ant Digest V94 #99  
To: Ham-Ant

Ham-Ant Digest                      Mon, 11 Apr 94                      Volume 94 : Issue    99

Today's Topics:

Coax Loss on HF (4 msgs)  
Egg beater?  
HF in an apartment  
Push up mast...advice needed  
Radio WANS

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>  
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: Sun, 10 Apr 1994 16:44:22 GMT  
From: ihnp4.ucsd.edu!library.ucla.edu!csulb.edu!csus.edu!netcom.com!  
gbrent@network.ucsd.edu  
Subject: Coax Loss on HF  
To: ham-ant@ucsd.edu

As Murphy's Law would dictate, the best trees and location for my 80/40  
meter dipole are at a point on my property quite distant from the ham  
shack. If I were to put the dipoles up at that point, my coax run would  
be approximately 350 feet.

Does anybody have any experience with long runs of coax at hf? With good  
quality coax, I can't imagine the loss would be that great. Theory is  
one thing - anybody have any experience? Would appreciate all comments.

Tnx es 73's, Gerry WA6E

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Date: 10 Apr 1994 17:42:46 GMT

From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!news.intercon.com!news1.digex.net!  
rtp.vnet.net!news.sprintlink.net!indirect.com!patrick@network.ucsd.edu

Subject: Coax Loss on HF

To: ham-ant@ucsd.edu

Gerald J. Brentnall (gbrent@netcom.com) wrote:

: As Murphy's Law would dictate, the best trees and location for my 80/40  
: meter dipole are at a point on my property quite distant from the ham  
: shack. If I were to put the dipoles up at that point, my coax run would  
: be approximately 350 feet.

In addition to the loss, which you can look up in the handbook, you will  
have a considerable problem supporting that much weight - I assume you will  
be using RG-8 or a derivative.

Why not use ladder line? We have always had great luck with it on long runs  
and you only have to worry about keeping it from twisting in the wind :)

73

Pat

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Date: 10 Apr 1994 20:48:58 GMT

From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!  
howland.reston.ans.net!news.intercon.com!news1.digex.net!rtp.vnet.net!  
news.sprintlink.net!indirect.com!kg7bk@network.ucsd.edu

Subject: Coax Loss on HF

To: ham-ant@ucsd.edu

Gerald J. Brentnall (gbrent@netcom.com) wrote:

: Does anybody have any experience with long runs of coax at hf?  
: Tnx es 73's, Gerry WA6E

Save your money and your losses, Gerry. 350 ft. of ladder-line costs  
about \$50. Even with an SWR of 1:1 on 40m, 350 ft of RG-58 will eat  
up more than half your power with a 3.5 db loss. Loss in 350 ft of  
ladder-line on 40m with an SWR of 1:1 is negligible, around 0.3 db.

Here's a question for you... would you radiate more RF with 350 ft. of  
RG-58 feeding a 50 ohm antenna with an SWR of 1:1 or with 350 ft. of  
ladder-line feeding a 50 ohm antenna with an SWR of 6:1? The answer is  
the RG-58 will have more than 3db loss and the ladder-line, even with

the 6:1 SWR, will have less than 1db loss. Ladder-line is the closest to something-for-nothing that I know of.

Do what the hams did before coax was economically feasible. Use ladder-line... and an antenna tuner.

73, Cecil, kg7bk@indirect.com

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Date: 10 Apr 1994 21:17:36 GMT  
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!wupost!crcnis1.unl.edu!  
unlinfo.unl.edu!mcduffie@network.ucsd.edu  
Subject: Coax Loss on HF  
To: ham-ant@ucsd.edu

patrick@indirect.com (Patrick Berry) writes:

>Gerald J. Brentnall (gbrent@netcom.com) wrote:

>: As Murphy's Law would dictate, the best trees and location for my 80/40  
>: meter dipole are at a point on my property quite distant from the ham  
>: shack. If I were to put the dipoles up at that point, my coax run would  
>: be approximately 350 feet.

>In addition to the loss, which you can look up in the handbook, you will  
>have a considerable problem supporting that much weight - I assume you will  
>be using RG-8 or a derivative.

>Why not use ladder line? We have always had great luck with it on long runs  
>and you only have to worry about keeping it from twisting in the wind :)

Well, ladder line is one good idea. However, if you want to run coax, do it. You will find it an advantage to have the antennas that far from the house. You won't get into the tv/vcr/phone/intercom/etc. nearly as much as you will with the antenna closer to the house. As for the weight, you only have to support the vertical portion. The horizontal run can lay on the ground, tie to a fence, go underground, whatever. Use copperweld for the antenna, and it will hold up almost anything. Use at least 9913 quality cable for the long run, and consider either 1/2" or 7/8" line, if you can afford it. The 1/2" line is more than good enough. There are some people who run 7/8" though.

73, Gary

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Date: Sun, 10 Apr 1994 22:48:37 GMT

From: netcomsv!netcom.com!wb6w@decwrl.dec.com  
Subject: Egg beater?  
To: ham-ant@ucsd.edu

I used an eggbeater on 2m mobile during a VHF contest shortly after the antenna became available. Perhaps the best QSO I have with it was a roundtable that included stations in the San Jose and Drakes Bay areas of California. I was mobile on I5 just 75 miles or so north of Sacramento at the time. I was able to continue conversing with the two stations as I drove down I505, I80 and I680 until I arrive home in Milpitas CA.

I was quite impressed by the antenna.

73 de Glenn wb6w@netcom.com

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Date: Mon, 11 Apr 1994 01:57:41 GMT  
From: netcomsv!netcom.com!potaczek@decwrl.dec.com  
Subject: HF in an apartment  
To: ham-ant@ucsd.edu

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Date: 9 Apr 94 20:22:53 GMT  
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!news.intercon.com!news1.digex.net!  
rtp.vnet.net!news.sprintlink.net!connected.com!beauty!rwing!eskimo!  
wrt@network.ucsd.edu  
Subject: Push up mast...advice needed  
To: ham-ant@ucsd.edu

In article <BW90C6p.darrylb@delphi.com>, <darrylb@delphi.com> wrote:

>I have very limited yard space for a tower, so  
>for the time being I'm going to use a Radio  
>Shack push-up mast mounted on the ground. It  
>is the 19 foot model, and the only antenna that  
>will be on it is a 5/8 wave 2 meter ground  
>plane.

>

>Can anyone advise me about setting this thing  
>up? RS has a reasonably good installation kit,  
>but it doesn't come with stakes for the support  
>wires. Any suggestions about suitable stakes  
>for a small mast like this?

>

>Also, how far from the base should I stake out

>support wires? I have looked through several  
>books on the subject, but can't seem to get a  
>definitive answer. I've seen angles on wires  
>from about 30 degrees to more than 60.  
>  
>73's and thanks, KD4CSW  
>DARRYLB@DELPHI.COM

Suggestion for stakes: get a piece of rebar (reinforcing bar used in concrete) and cut it into suitable lengths. It will rust, eventually, but you'll probably take the antenna down and put up something else long before that becomes a problem :->

45 degrees is a good figure for guy wire angles. If you have guys fastened at the 15 foot level for example, just put the stakes 15 feet out from the base. The problem comes when you try to put the stakes too close to the base. The upward pull becomes greater than the sideways pull and tends to pull out the stake. Stakes can resist a sideways pull far better than a vertical one.

Oh, yes. The easy way to cut rebar is to use what's known as a "cut-off" wheel on a circular saw. It doesn't really cut so much as it grinds its way through. The ridges on rebar will help greatly to resist pulling out.

73 es gl

Bill, W7LZP

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Date: Sun, 10 Apr 1994 10:53:28 GMT  
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!  
howland.reston.ans.net!pipex!uknet!nsa.bt.co.uk!andrew@network.ucsd.edu  
Subject: Radio WAns  
To: ham-ant@ucsd.edu

Hello all,

I am very interested in finding out about the state of the market for Radio Wans. This is both for potential applications I'm interested in and also for general interest.

I am based in a the Highlands of Scotland which has it's own comms problems due to the terrain and dispersion of population amongst

other things. I can see radio comms as having uses in our area.  
I would be interested in any info people can give in this area eg  
how advanced the market is, who are the main players (plus contacts  
if possible), costs, performance, future plans, even if there's a  
more relevant newsgroup I should be addressing.

Thanks in advance for your time

Andrew Muir

Highlands & Islands Enterprise, Inverness, Scotland   muir\_a@nsagw.nsa.bt.cp.uk

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Date: Mon, 11 Apr 1994 00:37:10 GMT  
From: rit!isc-newsserver!ultb!jdc3538@cs.rochester.edu  
To: ham-ant@ucsd.edu

References <199403310838.AAA11984@ucsd.edu>,  
<1994Apr3.171753.9535@news.vanderbilt.edu>, <wb6wCo2FD1.JBw@netcom.com>  
Subject : Re: Egg beater?

In article <wb6wCo2FD1.JBw@netcom.com> wb6w@netcom.com (Glenn Thomas) writes:  
>I used an eggbeater on 2m mobile during a VHF contest shortly after the  
>(etc.)  
>I was quite impressed by the antenna.  
>  
>73 de Glenn wb6w@netcom.com

What's an "eggbeater" antenna?

73...Jim   N2VNO

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End of Ham-Ant Digest V94 #99  
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